

THAT WHICH IS CLAIMED IS:

1. A vehicle control system for a vehicle comprising a vehicle data communication bus extending throughout the vehicle, the system comprising:

a plurality of user control devices;

a first controller at the vehicle for generating a data bus code on the vehicle data communication bus from among a series of data bus codes and based upon a respective user control device, each data bus code of the series having a common function portion and having an identity portion that is different for each respective user control device; and

a second multi-vehicle controller at the vehicle for comparing a data bus code on the vehicle data communication bus with a vehicle code learning index to determine the vehicle from among a plurality of different vehicles, the vehicle code learning index comprising a plurality of possible data bus codes each comprising a respective common function portion for each different vehicle with a don't care condition specified for each user control device identity portion.

2. The vehicle control system of Claim 1 wherein each of said user control devices comprises an ignition token.

3. The vehicle control system of Claim 1 wherein each of said user control devices comprises a remote transmitter.

4. The vehicle control system of Claim 1 wherein the series of data bus codes comprises a series of vehicle door lock codes.

5. The vehicle control system of Claim 1 wherein the series of data bus codes comprises a series of vehicle door unlock codes.

6. The vehicle control system of Claim 1 wherein the series of data bus codes comprises a series of codes authorizing vehicle engine starting.

7. The vehicle control system of Claim 1 wherein said second multi-vehicle controller is switchable to a learning mode for determining the vehicle.

8. The vehicle control system of Claim 1 wherein said second multi-vehicle controller further comprises memory for storing the vehicle code learning index.

9. The vehicle control system of Claim 1 wherein said second multi-vehicle controller further comprises a download device for downloading the vehicle code learning index.

10. The vehicle control system of Claim 1 further comprising an alarm indicator and at least one vehicle security sensor positioned in the vehicle, and wherein said second multi-vehicle controller causes said

alarm indicator to provide an alarm indication based upon the at least one vehicle security sensor.

11. The vehicle control system of Claim 1 wherein said second multi-vehicle controller comprises a bus interface for interfacing to the vehicle data communication bus.

12. The vehicle control system of Claim 1 wherein said first controller comprises a body control module (BCM).

13. The vehicle control system of Claim 1 wherein said first controller comprises a remote keyless entry (RKE) controller.

14. A vehicle control device for a vehicle comprising a vehicle data communication bus extending throughout the vehicle, the device comprising:

a multi-vehicle controller connected to the vehicle data communication bus and comprising a memory for storing a vehicle code learning index;

said multi-vehicle controller for comparing a data bus code on the vehicle data communication bus with the vehicle code learning index to determine the vehicle from among a plurality of different vehicles;

the data bus code on the vehicle data communication bus being from among a series of data bus codes and based upon a signal from a respective one of a plurality of user control devices, each data bus code of the series having a common function portion and having an

identity portion that is different for each respective user control device;

the vehicle code learning index comprising a plurality of possible data bus codes each comprising a respective common function portion for each different vehicle with a don't care condition specified for each identity portion.

15. The vehicle control device of Claim 14 wherein the series of data bus codes comprises a series of vehicle door lock codes.

16. The vehicle control device of Claim 14 wherein the series of data bus codes comprises a series of vehicle door unlock codes.

17. The vehicle control system of Claim 14 wherein the series of data bus codes comprises a series of codes authorizing vehicle engine starting.

18. The vehicle control device of Claim 14 wherein said multi-vehicle controller is switchable to a learning mode for determining the vehicle.

19. The vehicle control device of Claim 14 wherein said second multi-vehicle controller comprises a bus interface for interfacing to the vehicle data communication bus.

20. The vehicle control device of Claim 14 wherein said second multi-vehicle controller further

comprises a download device for downloading the vehicle code learning index.

21. The vehicle control device of Claim 14 further comprising an alarm indicator and at least one vehicle security sensor positioned in the vehicle, and wherein said multi-vehicle controller causes said alarm indicator to provide an alarm indication based upon the at least one vehicle security sensor.

22. A vehicle control method for a vehicle comprising a vehicle data communication bus extending throughout the vehicle, the method comprising:

generating a data bus code on the vehicle data communication bus from among a series of data bus codes based upon a respective one of a plurality of user control devices, each data bus code of the series having a common function portion and having an identity portion that is different for each respective user control device; and

comparing the data bus code on the vehicle data communication bus with a vehicle code learning index to determine the vehicle from among a plurality of different vehicles, the vehicle code learning index comprising a plurality of possible data bus codes each comprising a respective common function portion for each different vehicle with a don't care condition specified for each identity portion.

23. The method of Claim 22 wherein each of the user control devices comprises an ignition token.

24. The method of Claim 22 wherein each of the user control devices comprises a remote transmitter.

25. The method of Claim 22 wherein the series of data bus codes comprises a series of vehicle door lock codes.

26. The method of Claim 22 wherein the series of data bus codes comprises a series of vehicle door unlock codes.

27. The vehicle control system of Claim 22 wherein the series of data bus codes comprises a series of codes authorizing vehicle engine starting.

28. The method of Claim 22 further comprising:
positioning an alarm indicator and at least one vehicle security sensor in the vehicle; and
causing the alarm indicator to provide an alarm indication based upon the at least one vehicle security sensor.